



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

August 28, 2001

CERTIFIED MAIL 7000 0520 0022 2560 0025 RETURN RECEIPT REQUESTED

Mr. Darrell H. Nordeen
Facility Manager
Ticona Polymers, Inc.
P.O. Box 428
Bishop, TX 78343

Re: Final Injection Well No Migration Exemption Reissuance Decision

Dear Mr. Nordeen:

Effective the date of this letter, the Environmental Protection Agency (EPA) approves the reissuance request for the Ticona Polymers, Inc. (Ticona) exemption to the land disposal restrictions for the three hazardous waste injection wells at the facility in Bishop, Texas.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to the EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells codified in 40 CFR Part 148, provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed, and by which exemptions pursuant to these petitions will be granted or denied.

A letter dated June 22, 2001, informed Ticona that the EPA was proposing to approve Ticona's petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on June 28, 2001, and closed on August 13, 2001. No comments were received.

Based on a detailed technical review of the submitted petition and support documents, the EPA has determined that this information for the Ticona facility meets the requirements of 40 CFR Part 148 by demonstrating no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this exemption to the land disposal restrictions:

Petition Reissuance Approval Conditions

The petition reissuance approval to continue to allow injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR 148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1).

1. This exemption is only for the injection wells WDW-210, WDW-211, and WDW-212 which were permitted by the Texas Natural Resource Conservation Commission.
2. Injection of restricted waste shall be limited to the following injection intervals for the following wells:

Well No. WDW-210 4,150 to 4,670 feet (+)
Well No. WDW-211 4,340 to 5,010 feet (*)
Well No. WDW-212 4,170 to 4,700 feet (#)

These injection intervals are within an injection zone occurring at the following depths:

Well No. WDW-210 3,565 to 4,865 feet (+)
Well No. WDW-211 3,720 to 5,100 feet (*)
Well No. WDW-212 3,580 to 4,900 feet (#)

- (+) Referenced to original open-hole log for Well WDW-210
(*) Referenced to open-hole well log of sidetrack #2
(#) Referenced to original open-hole log for WDW-212

3. The cumulative volume injected into each sand during any given month shall not exceed that calculated by multiplying (the injection rate in gallons per minute (gpm)) (60 minutes per hour) (24 hours per day) (the number of days in that month). The appropriate injection rate for this calculation for each sand should be determined from the following table. The results from the most recent annual flow profiles will be used to allocate the injection into each sand for wells completed into more than one injection interval.

<u>Sand</u>	<u>Injection rate</u>
4,200'	65 gpm
4,300'/4,400'	200 gpm
4,500'	50 gpm

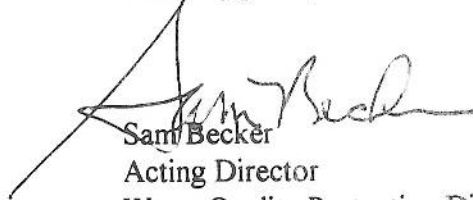
4. The facility shall cease injection on December 31, 2020.

5. The characteristics of the injected waste stream shall at all times conform to those of Section 2 in this petition reissuance. The running three whole calendar month volume weighted average density of the waste stream shall remain within a range of 0.996 to 1.106 g/cm³, measured at 80°F. The running three month average shall be calculated by multiplying each day's waste stream average density value by that day's injected volume, totaling those values for the previous whole three month period, and dividing by that three month injected volume.
6. The proposed approval for injection is limited to the following hazardous wastes:
D001 D002 D004 D005 D006 D007 D008 D011 D018 D035
F002 F003 F005 F039 P022 U001 U002 U019 U031 U056
U072 U080 U112 U115 U122 U123 U133 U134 U140 U154
U159 U161 U188 U226
7. Ticona must petition for approval to inject additional hazardous wastes which are not included in Condition No. 6, above. Ticona must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuance and modifications should be made pursuant to §148.20(e) or (f).
8. Ticona shall annually submit to EPA the results of a bottom hole pressure survey for each well. These surveys shall be performed after shutting in each well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with §146.68(e)(1). This annual report should include a comparison of reservoir parameters determined from the falloff tests with parameters used in the approved no migration petition.
9. Ticona shall annually submit to EPA the results of a flow profile survey for each well in the petition completed into more than one injection interval. This survey should be used to calculate the cumulative injection into the individual sands and demonstrate the cumulative injection into any sand does not exceed the volume restrictions in Condition No. 3.
10. Upon the expiration, cancellation, reissuance, or modification of the Texas Natural Resource Conservation Commission's Underground Injection Control permits for Well Nos. WDW-210, WDW-211, and WDW-212, this exemption is subject to review. A new demonstration may be required if information shows that the basis of granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this petition reissuance is contingent on the validity of the information submitted in the Ticona Bishop Facility petition reissuance for an exemption to the land disposal restrictions. This reissuance decision is subject to termination when any of the conditions occur listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Philip Dellinger at (214) 665-7165.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Sam Becker", is written over a printed name and title.

Sam Becker

Acting Director

Water Quality Protection Division

cc: Bruce Kobelski, USEPA OGWDW
Ben Knape, TNRCC